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REMARKS/DISCUSSION OF ISSUES

In the Final Office Action, Examiner Zheng rejected independent claims 11 and 23 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,519,292 B1 to *Sakoda* et al. The Applicant hereby respectfully traverses this anticipation rejection of independent claims 11 and 23, and requests reconsideration of independent claims 11 and 23 in view of the following remarks.

As to the traversal, the Applicant has thoroughly considered Examiner Zheng's remarks concerning the patentability of independent claims 11 and 23 over *Sakoda*. The Applicant has also thoroughly re-read *Sakoda*. To warrant this anticipation rejection of independent claims 11 and 23, *Sakoda* must show each and every limitation of independent claims 11 and 23 in as complete detail as is contained in independent claims 11 and 23. See, MPEP §2131. The Applicant respectfully traverses this anticipation rejection of independent claims 11 and 23, because *Sakoda* fails to teach or suggest "multiplying a lower bit rate signal and a second PN-code sequence to yield the lower bit rate product, wherein the lower bit rate product has a chip rate equal to a bit rate of the higher bit rate signal" as recited in independent claim 11, and "means for multiplying the lower bit rate signal by the first PN-code sequence and a second PN-code sequence to give the spread spectrum signal the predetermined output chip rate, wherein a lower bit rate product of the lower bit rate signal and the second PN-code sequence has a chip rate equal to the higher bit rate of the higher bit rate signal" as recited in independent claim 23.

Specifically, as illustrated in FIG. 6, *Sakoda* teaches a predetermined output chip rate of 2048 Kcps for a spread spectrum signal S43 in a transmitter 40 that is obtained by a spreading of a bit rate signal S42 by a spread code C11 to yield spread spectrum signal S43 at 2048 Kcps, which is subsequently scrambled by a scramble code C12 to yield a scrambled spread spectrum signal S44 at 2048 Kcps. To this end, *Sakoda* teaches a control section 42 for changing a coded bit rate of bit rate signal S42 and a spreading ratio of spread code C11 as a function of time.

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Specifically, the coded bit rate of bit rate signal S42 is 64 Kcbps and the spreading ratio of spread code C11 is 32 for a first time period. The coded bit rate of bit rate signal S42 is 128 Kcbps and the spreading ratio of spread code C11 is 16 for a second time period. The coded bit rate of bit rate signal S42 is 204.8 Kcbps and the spreading ratio of spread code C11 is 10 for a third time period. And, the coded bit rate of bit rate signal S42 is 256 Kcbps and the spreading ratio of spread code C11 is 8 for a final time period. See, Sakoda at column 9, line 6 to column 13, line 52.

Thus, unequivocally, spread code C11 of *Sakoda* is encompassed by the term "PN-code sequence" as recited in independent claims 11 and 23 as evidenced by the fact that bit rate signal S42 is widened by spread code C11 to yield spread spectrum signal S43 at a predetermined output chip rate of 2048 Kcps. Specifically, spread code C11 has a spread ratio SP of 32 for a first time period to widened bit rate signal S42 from 64 Kcbps to yield spread spectrum signal S43 at a predetermined output chip rate of 2048 kcps.

Second, spread code C11 has a spread ratio SP of 16 for a second time period to widened bit rate signal S42 from 128 Kcbps to yield spread spectrum signal S43 at a predetermined output chip rate of 2048 kcps.

Third, spread code C11 has a spread ratio SP of 10 for a third time period to widened signal S42 from 204.8 Kcbps to yield spread spectrum signal S43 at a predetermined output chip rate of 2048 kcps.

And, fourth, spread code C11 has a spread ratio SP of 8 for a final time period to widened signal S42 from 256Kcbps to yield spread spectrum signal S43 at a predetermined output chip rate of 2048 kcps.

The issue is whether scramble code C12 of *Sakoda* is encompassed by the term "PN code sequence" as recited in independent claims 11 and 23 despite the fact that *Sakoda* teaches scramble code C12 for scrambling spread spectrum signal S43 to yield scrambled spread spectrum signal S44 at a predetermined output chip rate of 2048 Kcps as set by spread spectrum signal S43 and not for purposes of spreading spread spectrum signal S43 to yield scrambled spread spectrum signal S44 as evidenced by the fact that signals S43 and S44 both have the same chip rate of 2048 Kcps. This issue is resolved by the following description of the only two possible

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implementations of scramble code C12 of *Sakoda* as a "PN code sequence" as recited in independent claims 11 and 23.

In a first case, bit rate signal S42 of *Sakoda* at 256 Kcbps is assumed to be the "high bit rate signal" of independent claims 11 and 23, bit rate signal S42 of *Sakoda* at 64 Kcbps is assumed to be the "low bit rate signal" of independent claims 11 and 23, and spreading code C11 of *Sakoda* is assumed to be the "first PN-code sequence" of independent claims 11 and 23. Under these assumptions, spreading code C11 with a spread ratio of 8 would be used to spread low bit rate signal S42 at 256 Kcbps to yield spread spectrum signal S43 with a predetermined chip output rate of 2048 Kcbps as required by independent claims 11 and 23, and if scramble code C12 of *Sakoda* is to be the "second PN-code sequence" as recited in claims 11 and 23, then scramble code C12 must be multiplied to low bit rate signal S42 at 64 Kcbps to yield a low bit rate product having the same chip rate of 256 Kcbps of high bit rate signal S42. However, in view of the fact that scramble code C12 does not have a spread ratio since it is a scramble code and not a spread code, multiplying scramble code C12 to low bit rate signal S42 at 64 Kcbps would yield a scrambled low bit rate product at 64 Kcbps and not at 256 Kcbps as required by independent claims 11 and 23.

In the other case, bit rate signal S42 of *Sakoda* at 256 Kcbps is assumed to be the "high bit rate signal" of independent claims 11 and 23, bit rate signal S42 of *Sakoda* at 64 Kcbps is assumed to be the "low bit rate signal" of independent claims 11 and 23, and spreading code C11 of *Sakoda* is assumed to be the "second PN-code sequence" of independent claims 11 and 23. Under these assumptions, spreading code C11 with a spread ratio of 32 would be used to spread low bit rate signal S42 at 64 Kcbps to yield spread spectrum signal S43 with a predetermined chip output rate of 2048 Kcbps as required by independent claims 11 and 23, and if scramble code C12 of *Sakoda* is to be the "first PN-code sequence" as recited in claims 11 and 23, then scramble code C12 must be multiplied to high bit rate signal S42 at 256 Kcbps to yield spread spectrum signal S43 with a predetermined chip output rate of 2048 Kcbps as required by independent claims 11 and 23. However, in view of the fact that scramble code C12 does not have a spread ratio since it is a scramble code and

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not a spread code, multiplying scramble code C12 to high bit rate signal S42 at 256 Kcbps would yield spread spectrum signal S43 at 256 Kcbps and not at 2048 Kcbps as required by independent claims 11 and 23.

In summary, code C12 of *Sakoda* CAN NOT be reasonably interpreted as a "PN-code sequence" of independent claims 11 and 12, because *Sakoda* teaches scramble code C12 as a scramble code and not a spread code. Withdrawal of the rejection of claims 11 and 23 under §102(e) as being anticipated by *Sakoda* is therefore respectfully requested.

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SUMMARY

Examiner Zheng's rejection of independent claims 11 and 23 has been obviated by the remarks herein supporting an allowance of claims 11 and 23 over *Sakoda*. The Applicant respectfully submits that claims 11-23 as listed herein fully satisfy the requirements of 35 U.S.C. §§ 102, 103 and 112. In view of the foregoing, favorable consideration and early passage to issue of the present application is respectfully requested. If any points remain in issue that may best be resolved through a personal or telephonic interview, Examiner Zheng is respectfully requested to contact the undersigned at the telephone number listed below.

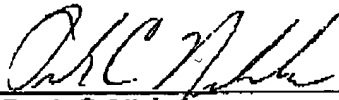
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